

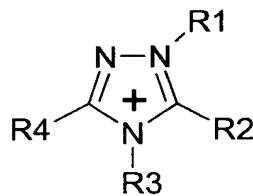
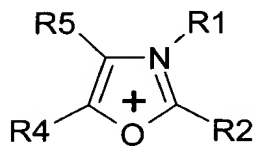
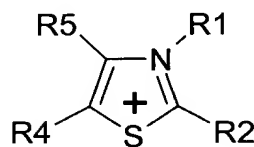
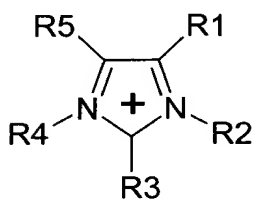
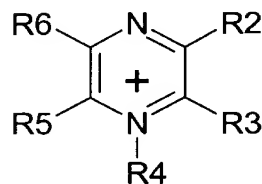
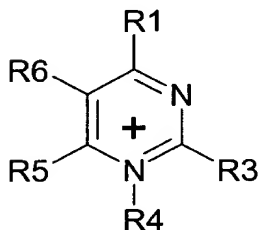
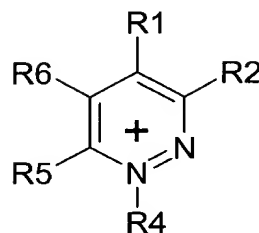
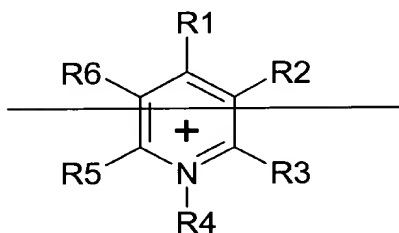
LISTING OF CLAIMS

1. (Currently amended) ~~An ionic liquid~~ A compound of the general formula



wherein:

K^+ is a cation selected from:

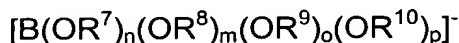


wherein

R^1 to R^6 are identical or different and are each individually

- H,
- a halogen,
- an alkyl radical (C_1 to C_8), which is unsubstituted, or which is partially or fully substituted by F, Cl, $N(C_nF_{(2n+1-x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$
- a phenyl radical which is unsubstituted or which is partially or fully substituted by F, Cl, $N(C_nF_{(2n+1-x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$, or
- one or more pairs of adjacent R^1 to R^6 can also be an alkylene or alkenylene radical and having up to 8 C atoms, wherein the radical is unsubstituted or partially or fully substituted by halogen, $N(C_nF_{(2n+1-x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$

wherein A^- is an anion selected from



wherein

$0 \leq n, m, o, p \leq 4$, and $m+n+o+p=4$, and

R^7 to R^{10} are different or identical and are each, individually:

an aromatic ring selected from a phenyl, anthracenyl and phenanthrenyl ring, which is unsubstituted, or which is monosubstituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or halogen, or

an aromatic heterocyclic ring selected from a pyridyl, pyrazyl and pyrimidyl ring, which is unsubstituted, or which is mono-substituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or

halogen,

or

~~an alkyl radical (C_4 to C_8), which is unsubstituted, or which is partially or fully substituted by F, Cl, $N(C_nF_{(2n+1-x)}H_x)_{2-}$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$, or $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$,~~

and wherein one or more pairs of R^7 to R^{10} can also form

an aromatic ring selected from a anthracenylene and phenanthrenylene ring, which is unsubstituted or an aromatic ring selected from a phenylene, naphthylene, anthracenylene and phenanthrenylene ring which is monosubstituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or halogen,

an aromatic heterocyclic ring selected from a pyridylene, pyrazylene and pyrimidylene ring, which is unsubstituted, or which is mono-substituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or halogen,

or

~~an alkylene or alkenylene radical having up to 8 C atoms and which is unsubstituted or which is partially or fully substituted by halogen, $N(C_nF_{(2n+1-x)}H_x)_{2-}$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$~~

or OR^7 to OR^{10} , individually or together,

~~are an aromatic having 6 to 14 C atoms and which is a dicarboxyl, oxysulfonyl or oxycarbenyl radical, which is unsubstituted, or which is partially or fully substituted by F, Cl, $N(C_nF_{(2n+1-x)}H_x)_{2-}$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$~~

or

are aliphatic having 1 to 6 C atoms and which is a carboxyl, dicarboxyl, oxysulfonyl or oxycarbonyl radical, which is unsubstituted, or which is partially or fully substituted by F, Cl, $N(C_nF_{(2n+1-x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$.

2. **(Currently amended)** ~~An ionic liquid~~ A compound according to claim 1, wherein at least one of R^1 to R^6 of the cation is an alkyl radical which is unsubstituted or partially or fully substituted by F, Cl, $N(C_nF_{(2n+1-x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$.

3. **(Currently amended)** ~~An ionic liquid~~ A compound according to claim 1, wherein at least one of R^1 to R^6 of the cation is a phenyl radical which is unsubstituted or partially or fully substituted by F, Cl, $N(C_nF_{(2n+1-x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$.

4. **((Currently amended)** ~~An ionic liquid~~ A compound according to claim 1, wherein at least a pair of R^1 to R^6 of the cation is an alkylene or alkenylene radical which is unsubstituted or partially or fully substituted by halogen, $N(C_nF_{(2n+1-x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$.

5. **(Cancelled)**

6. **(Cancelled)**

7. **(Currently amended)** ~~An ionic liquid~~ A compound according to claim 1, wherein at least one of R^7 to R^{10} of the anion is an aromatic ring selected from a phenyl, anthracenyl and phenanthrenyl ring, which is unsubstituted, or which is monosubstituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or by a halogen.

8. **(Currently amended)** ~~An ionic liquid~~ A compound according to claim 1, wherein at least one of R^7 to R^{10} of the anion is an aromatic heterocyclic ring selected from a pyridyl, pyrazyl and pyrimidyl ring, which is unsubstituted, or which is monosubstituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or {F, Cl or Br}.

9. **(Currently amended)** ~~An ionic liquid~~ A compound according to claim 1, wherein at least one pair of R^7 to R^{10} of the anion is an aromatic ring selected from an anthracenylene and phenanthrenylene ring, which is unsubstituted or a phenylene, naphthylene, anthracenylene and phenanthrenylene ring, which is monosubstituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or halogen.

10. **(Currently amended)** ~~An ionic liquid~~ A compound according to claim 1, wherein at least one pair of R^7 to R^{10} of the anion is an aromatic heterocyclic ring selected from a pyridylene, pyrazylene and pyrimidylene ring, which is unsubstituted, or which is mono-substituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or by halogen.

11. **(Original)** An electrochemical cell comprising a cathode, an anode, a separator, and the ionic liquid of claim 1.

12. **(Original)** A supercapacitor comprised of at least a pair of electrodes, a separator, and the ionic liquid of claim 1.

13. **(Original)** An electrolyte composition comprising an ionic liquid of claim 1 and an aprotic solvent.

14. **(Original)** An electrolyte composition comprising an ionic liquid of claim 1 and a conductive salt.

15. **(Currently amended)** A method for making ~~an ionic liquid~~ a compound according to claim 1, comprising reacting a chloride salt of the formula K^+Cl^- with a lithium salt of the formula Li^+A^- within an aprotic solvent.

16. **(Currently amended)** ~~An ionic liquid~~ A compound according to claim 1, selected from :

1-ethyl-3-methylimidazolium bis [1,2-benzenediolato-O,O'] borate,

1-ethyl-3-methylimidazolium bis[oxalato]borate, and

1-ethyl-3-methylimidazolium bis[salicylato]borate.

17. **(previously presented)** A compound according to claim 16, wherein said compound is:

1-ethyl-3-methylimidazolium bis [1,2-benzenediolato-O,O'] borate.

18. **(Canceled)**

19. **(Canceled)**

20. **(previously presented)** A compound according to claim 16,

wherein said compound is:

1-ethyl-3-methylimidazolium bis[oxalato]borate.

21. **(Previously presented)** A compound according to claim 1,
wherein OR⁷ to OR¹⁰, individually or together,

are aliphatic having 1 to 6 C atoms and which is a carboxyl, dicarboxyl, oxysulfonyl or oxycarbonyl radical, which is unsubstituted, or which is partially or fully substituted by F, Cl, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x) or C_nF_(2n+1-x)H_x, wherein 1<n<6 and 0<x≤13.

22. **(Canceled)**